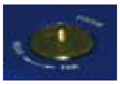
DS4800N

Compact Laser Scanner



Smart Focus Adjustment



Oscillating Mirror version

Xpress interface

Ease Of Setup



ACR4™ Technology



Highlights

DS4800 is an industrial laser scanner combining flexibility and compactness thus satisfying all application needs of the production plant.

HUGE FLEXIBILITY
Through the smart focus adjustment DS4800 optimizes the performances based on the reading distance. This extends the reading area and improves the overall read rate.

EXCELLENT PERFORMANCE
Thanks to DIGITECH™ technology, DS4800 provides excellent reading performance on low quality barcodes. By means of optimized reading recipes, DS4800 improves reading rate on low contrast barcodes while granting excellent performance at high skew angles.
Additionally, ACR4™ reconstruction technology allows to increase maximum tilt angle and decoding rate on damaged barcodes.

EASE OF USE
The intuitive X-PRESS™ Human Machine Interface makes installation and maintenance easier than ever thanks to a five LED bar-graph and the multi-function key providing immediate access to relevant functions: Test Mode (for bar code verification), Auto Learn (for automatic code setting) and Auto Setup (for self optimization of reading performance). DS4800 is easily programmed through the multi-language Genius™ SW tool. Thanks to the wizard approach and graphic add-ons, the scanner configuration is rapidly accomplished.

ENHANCED CONNECTIVITY
DS4800 is equipped with the embedded high-speed ID-NET™ communication interface. ID-NET™ allows efficient data collection without the need of external multiplexer providing overall cost reduction and simplifying network wiring.
Extended Fieldbus and Ethernet connectivity is available through a complete range of modular connection boxes.

INDUSTRIAL FEATURES
With its rugged construction, IP65 protection class, 50°C max operating temperature and total ambient light immunity, DS4800 is suitable for all main industrial applications. With its integrated heating system, DS4800 Subzero model features an operating temperature down to -35°C (-31°F).

Features

- Smart Focus adjustment for flexible reading area selection
- Linear and Oscillating Mirror versions
- Subzero version for low temperature environments
- DIGITECH™ technology allows excellent reading performance
- X-PRESS™ interface for easy and intuitive scanner setup
- ACR4™ reconstruction technology improves reading of damaged barcodes
- Easy setup through multilanguage Genius™ software tool
- ID-NET™ embedded interface for high-speed communication networks
- Multilanguage display improves scanner monitoring and diagnostic
- Total ambient light immunity thanks to the high frequency laser modulation
- IP65 rugged industrial housing

Applications

- Automated warehousing
- Reading on pallets
- Picking systems
- Automated shop floor
- Items and parts tracking
- Process control systems
- Cold Storage Environments

DS4800N

Specifications

Models

Order No.	Description
931061318	DS4800-1000 ADJ FOCUS, LINEAR
931061321	DS4800-1100 ADJ FOCUS, OSCILLATING MIRROR
931061322	DS4800-1005 ADJ FOCUS, LINEAR, SUBZERO

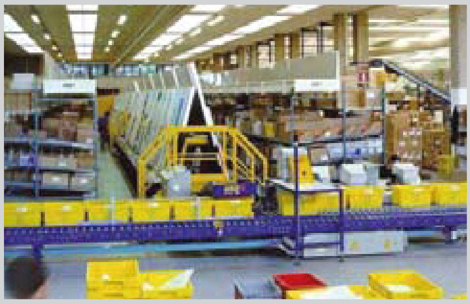
Accessories

Order No.	Description
93ACC1785	GFC-40 105 DEGREES MIRROR DS4800
93ACC1867	GFC-400 ADJ MIRROR CONTACT READING
93ACC1837	BK-4000 L-SHAPE BRACKET (5 PCS)
93ACC1838	BK-4001 U-SHAPE BRACKET (5 PCS)

Technical Data

	DS4800-1000	DS4800-1100	DS4800-1005
DIMENSIONS	101 x 85 x 42 mm (3.97 x 3.33 x 1.65 in)	117 x 123 x 48 mm (4.60 x 4.84 x 1.89 in)	101 x 85 x 42 mm (3.97 x 3.33 x 1.65 in)
WEIGHT	570 gr. (20.11 oz.)	780 gr. (27.9 oz.)	580 g (20.5 oz)
OPERATING TEMPERATURE	0 to 50 °C (32 to 122 °F)	0 to 50 °C (32 to 122 °F)	-35 to +50 °C (-31 to +122 °F)
STORAGE TEMPERATURE	-20 to 70 °C (-4 to 158 °F)	-20 to 70 °C (-4 to 158 °F)	-35 to +70 °C (-31 to +158 °F)
HUMIDITY	90% non condensing		
VIBRATION RESISTANCE	IEC 68-2-6 test FC 1.5mm; 10 to 55 Hz; 2 hours on each axis		
SHOCK RESISTANCE	IEC 68-2-27 test EA 30 G; 11 ms; 3 shocks on each axis		
CASE MATERIAL	Aluminum		
PROTECTION CLASS	IP65		
LIGHT SOURCE	Visible laser diode (630 to 680 nm)		
AMBIENT LIGHT REJECTION	30000 LUX		
SCANNING SPEED	600 to 1000 scan/s		
RESOLUTION	Up to 0.20 mm (8 mils)		
READING DISTANCE	Up to 1000 mm on 0.50 mm (20 mils) barcodes		
DEPTH OF FIELD	Up to 600 mm on 0.50 mm (20 mils) barcodes		
APERTURE ANGLE	50 degrees		
READABLE CODES	Code 2/5, Code39, Code93, Code128, EAN/UPC, EAN128, Codabar, Pharmacode, Plessey, ISBT128		
MULTILABEL READING	Up to 10 different symbologies during the same reading phase		
COMMUNICATION INTERFACES	Main port RS232/RS422/RS485 up to 115.2 Kbit/s Auxiliary port RS232 up to 115.2 kbps / ID-NET™ port up to 1 Mbps		
CONNECTIVITY MODES	Pass Through, Master/Slave, Multiplexer		
DIGITAL INPUTS	Two SW programmable, optocoupled, NPN/PNP		
DIGITAL OUTPUTS	Two SW programmable, event driven, optocoupled		
DEVICE PROGRAMMING	X-PRESS™ Human Machine Interface / Windows™ based SW (Genius™) via serial link Serial Host Mode Programming sequences		
OPERATING MODES	'On-line', 'Serial On-line', 'Automatic', 'Continuous', 'Test', 'Verifier'		
USER INTERFACE	X-PRESS™ Human Machine Interface Programmable Push Button, LEDs (Status, Com, Trigger, Good, Ready, Power On)		
DISPLAY	16 x 2 characters		
LASER CLASSIFICATION	IEC 825-1 Class2; CDRH Class II		
LASER CONTROL	Safety system to turn laser off in cases of motor slowdown or failure		
MOTOR CONTROL	Motor On/Off command string and Motor Speed SW programmable		
POWER SUPPLY:	10 - 30 VDC	10 - 30 VDC	24 VDC ±10%
POWER CONSUMPTION:	6 W	7.5 W	28.8 W

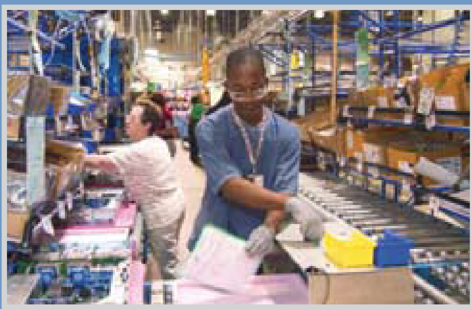
Applications



Automated Warehousing



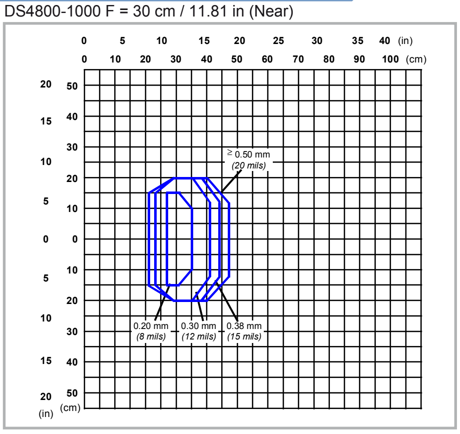
Automated Shop Floor



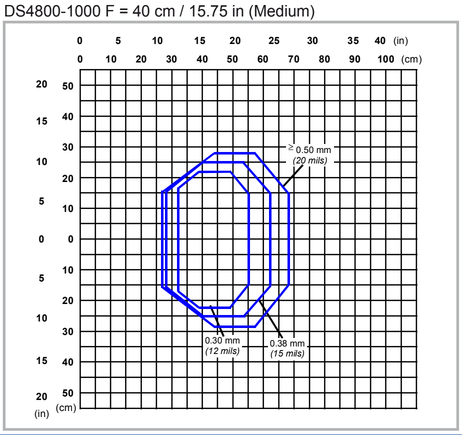
Picking System

Reading Diagrams

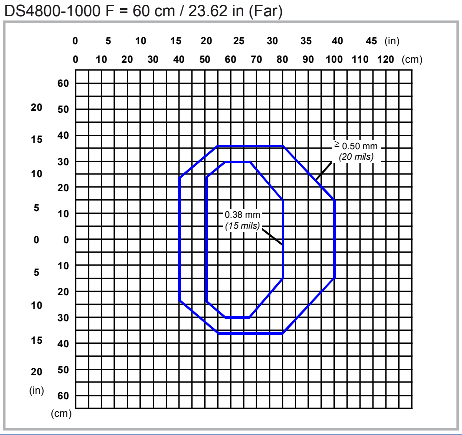
DS4800-1000 F = 30 cm / 11.81 in (Near)



DS4800-1000 F = 40 cm / 15.75 in (Medium)



DS4800-1000 F = 60 cm / 23.62 in (Far)



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For more information and software downloads see: www.automation.datalogic.com/DS4800

DATALOGIC AUTOMATION